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FOR IMMEDIATE RELEASE

Plexon Inc Releases PlexStim™ Electrical Stimulator Version 2.3 Now Supporting 64 Channels

DALLAS, TEXAS -- (May 27, 2015) - Plexon Inc, the leader in advanced hardware and software solutions for neuroscience and behavioral research, is pleased to announce that PlexStim™ software 2.3 is now available online for the PlexStim Electrical Stimulator (PlexStim), an electrically isolated, individually programmable, constant current stimulator system. The new release now enables the individual control of up to 64 independent stimulation channels (via four 16 channel devices) with the use of the new, accompanying PlexStim software development kit (SDK) among other advancements.

PlexStim operating software version 2.3 offers discerning researchers improved reliability, power scheme and electrical isolation over the previous system. It can generate arbitrary waveform patterns initiated from either the software interface or from externally triggered digital inputs. The graphical user interface (GUI) makes it easy to generate bi-phasic rectangular pulses and bursts of pulses repeated at specific rates. More complicated rectangular waveforms and non-rectangular arbitrary waveforms may be defined in and loaded from a simple text file.

Every stimulation pattern can be started and stopped either manually within the GUI, or with an external digital trigger (TTL). Complex stimulation patterns can be delivered in this way with precise timing based on different triggers. Each channel has a dedicated digital input that may be used in an edge triggered or level triggered (gated) mode to initiate stimulation with microsecond latency. Each channel also has a dedicated digital output signal to third party devices when stimulation is occurring. The actual current and voltage delivered to each electrode can be conveniently monitored on a per-channel basis with stimulation currents defined with 16-bit precision up to ±1mA and delivered with ±10V compliance.

To further expand of how researchers are able to leverage PlexStim, Plexon has developed 32- and 64-bit SDKs for use with C/C++ or MATLAB®, as well as instructions for use with LabVIEW®. The newest SDKs enable the programming of additional channels up to 64 channels (in the presence of the appropriate number of PlexStim devices), and include several new functions. The SDKs are included in the installers and automatically available following the installation of the software.

Newly purchased PlexStim devices will arrive loaded with the updated firmware and software and able to utilize the new functionality. However, existing systems in the field require a firmware upgrade to operate software version 2.3. Plexon will provide a FREE firmware and power upgrade for all existing users of the PlexStim system. To take advantage of the FREE upgrade, email support@plexon.com for more information.

Several documents supporting version 2.3 of the new software, firmware and SDKs have been developed as follows: *PlexStim Electrical Stimulator User Guide, PlexStim Electrical Stimulator DLL Guide, PlexStim Electrical Stimulator 2.3 MATLAB API Definitions, PlexStim Electrical Stimulator Datasheet,* and the *PlexStim Electrical Stimulator Change Log.* All documents listed, as well as the new installers available for Windows® 7, are available online under either “Documentation” or “Software Downloads” within the Support section of the website.

About Plexon Inc

Plexon is a pioneer and leading innovator of custom, high performance data acquisition, behavior and analysis solutions specifically designed for scientific research. We collaborate with and supply thousands of customers including the most prestigious neuroscience laboratories around the globe driving new frontiers in areas including basic science, brain-machine interfaces (BMI), neurodegenerative diseases, addictive behaviors and neuroprosthetics. Plexon offers integrated solutions for *in vivo* neurophysiology, optogenetics and behavioral research -- backed by its industry-leading commitment to quality and customer support. www.plexon.com.